Mrs. Hayden

Name Key Date

Algebra Review

Simplify.

1. $\sqrt{50}$ $5\sqrt{2}$

2. $\sqrt{108}$ $6\sqrt{3}$

3. $\sqrt{81}$ 9

4. $\sqrt{45}$ $3\sqrt{5}$

5. $\sqrt{243}$ $9\sqrt{3}$

6. $\sqrt{\frac{16}{25}}$ $\frac{4}{5}$

7. $\sqrt{\frac{3}{8}}$ $\frac{\sqrt{3}}{2\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{6}}{4}$

8. $\sqrt{\frac{5}{9}}$ $\frac{\sqrt{5}}{3}$

9. $\frac{10}{\sqrt{24}}$ $\frac{5}{\sqrt{6}} \cdot \frac{\sqrt{6}}{\sqrt{6}} = \frac{5\sqrt{6}}{6}$

10. $2\sqrt{12} - 3\sqrt{27} + 2\sqrt{48}$ $4\sqrt{3} - 9\sqrt{3} + 8\sqrt{3}$ $3\sqrt{3}$

11. $3\sqrt{45} - 5\sqrt{80} + 4\sqrt{20}$ $9\sqrt{5}$ $9\sqrt{5} - 20\sqrt{5} + 8\sqrt{5}$ $-3\sqrt{5}$

12. $3\sqrt{12} \cdot 2\sqrt{21}$ $6\sqrt{3} \cdot 2\sqrt{21}$ $12\sqrt{63}$ $36\sqrt{7}$

13. $-3\sqrt{24} \cdot 5\sqrt{20}$ $-6\sqrt{6}$ $10\sqrt{6}$ $-60\sqrt{30}$

To review the other Algebra problems please redo 2 problems from sections II-VI from the summer packet. Show work and answers below. **Pick any two.**

II. #1

II. #2

III. #1

See Key to summer packet

III. #2

IV. #1

IV. #2

V. #1

V. #2

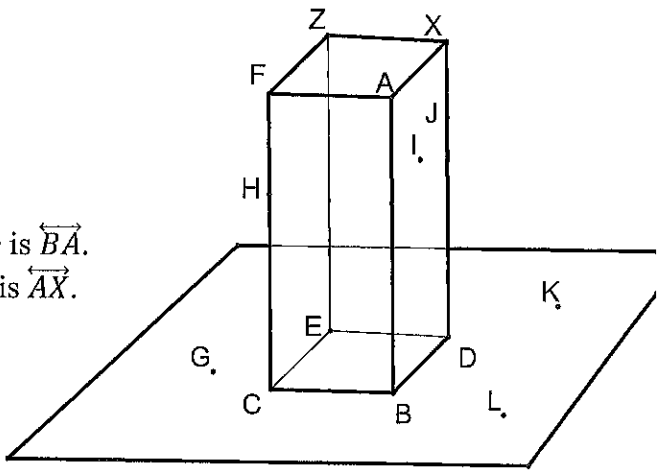
VI. #1

VI. #2

202 1.1 Review Extra questions.

True or False.

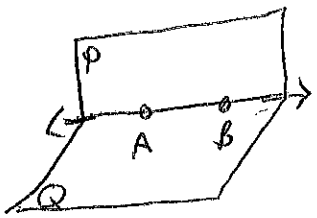
1. T $\overleftrightarrow{DB}$ and $\overleftrightarrow{JX}$ intersect in point D.
2. F $\overleftrightarrow{FH}$ and $\overleftrightarrow{CB}$ intersect in point H.
3. T Another name for plane BCL is plane DLK.
4. T Another name for plane ZFA is plane XFA.
5. F Another name for plane EDL is plane EDX.
6. T Another name for $\overleftrightarrow{JD}$ is $\overleftrightarrow{XD}$.
7. T The intersection of plane HBC and plane ABD is $\overleftrightarrow{BA}$.
8. F The intersection of plane ECL and plane AXD is $\overleftrightarrow{AX}$.
9. T Any 3 points are coplanar.
10. T Any 2 points are collinear.
11. X, B, or D Name a point coplanar with A, I, and J.
12. X Name a point collinear with D and J.



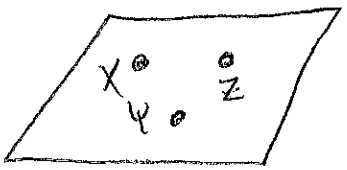
sample answer

Draw and label the following.

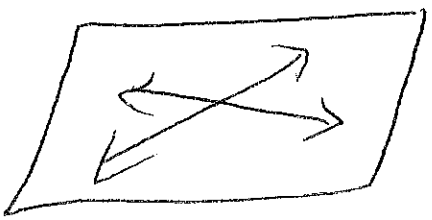
Planes P and Q intersecting in $\overleftrightarrow{AB}$



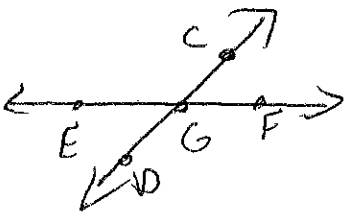
3 coplanar points



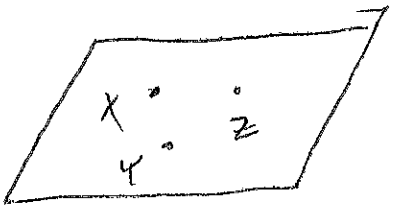
A plane containing 2 intersecting lines



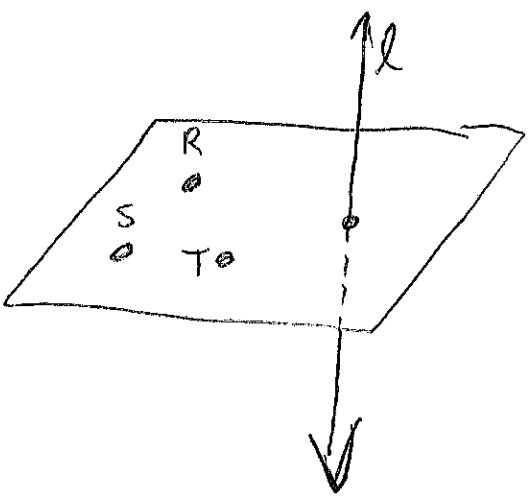
$\overleftrightarrow{CD}$ and $\overleftrightarrow{EF}$ intersecting in G



3 non-collinear points



Plane RST intersecting line *l*

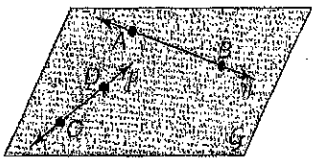


NAME _____ DATE _____ PERIOD _____

1-1 Skills Practice

Points, Lines, and Planes

Refer to the figure.



1. Name a line that contains point D.

line p, or $\overleftrightarrow{DO}$ or $\overleftrightarrow{OD}$

2. Name a point contained in line n.

A or B

3. What is another name for line p?

$\overleftrightarrow{DO}$ or $\overleftrightarrow{OD}$

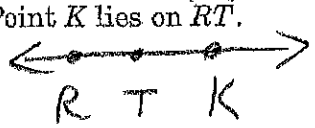
4. Name the plane containing lines n and p.

plane $\mathcal{Y}$ or plane DOA, DAB etc... * any 3 noncollinear pts

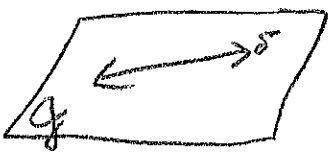
Draw and label a figure for each relationship.

sample

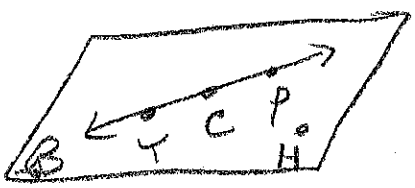
5. Point K lies on $\overline{RT}$.



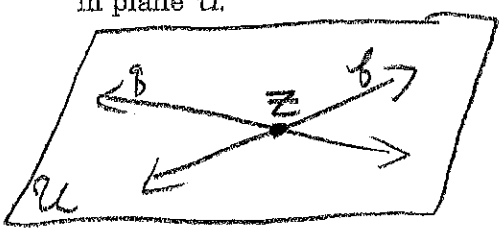
6. Plane $\mathcal{J}$ contains line s.



7. $\overline{YP}$ lies in plane $\mathcal{B}$ and contains point C, but does not contain point H.



8. Lines q and f intersect at point Z in plane $\mathcal{U}$.



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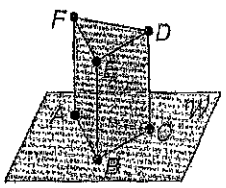


9. How many planes are shown in the figure?

5

10. How many of the planes contain points F and E?

2 (in the picture)

11. Name four points that are coplanar.

E, D, O, B or A, B, E, F

12. Are points A, B, and C coplanar? Explain.

yes on same plane

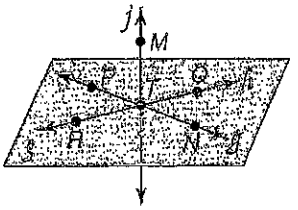
Lesson 1-1

NAME _____ DATE _____ PERIOD _____

1-1 Practice

Points, Lines, and Planes

Refer to the figure.



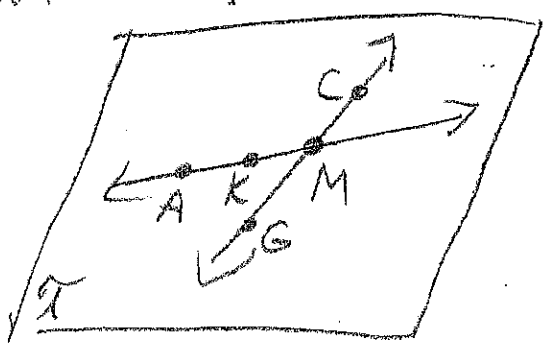
1. Name a line that contains points T and P.
$\overleftrightarrow{TP}$ or $\overleftrightarrow{PT}$ or line g or $\overleftrightarrow{TN}$ $\overleftrightarrow{PN}$ $\overleftrightarrow{NT}$ $\overleftrightarrow{NP}$

2. Name a line that intersects the plane containing points Q, N, and P.
line j

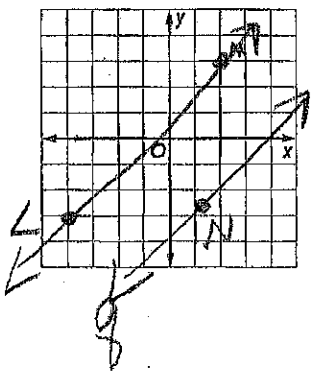
3. Name the plane that contains $\overline{TN}$ and $\overline{QR}$.
plane S or plane PTQ, PTN, RTP, QTN, etc... any 3 noncollinear pts.

Draw and label a figure for each relationship.

4. $\overleftrightarrow{AK}$ and $\overleftrightarrow{CG}$ intersect at point M in plane $\mathcal{T}$.
sample



5. A line contains $L(-4, -4)$ and $M(2, 3)$. Line q is in the same coordinate plane but does not intersect $\overleftrightarrow{LM}$. Line q contains point N.



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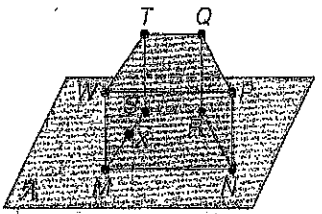

6. How many planes are shown in the figure?
6

7. Name three collinear points. M, X, S

8. Are points N, R, S, and W coplanar? Explain.
No N, R, S are on plane a but W is not

VISUALIZATION Name the geometric term(s) modeled by each object.

9. 
plane

10. tip of pin 
point

11. 

lines

12. a car antenna
line

13. a library card
plane